WHAT IS CLAIMED IS:

1. An athermal arrayed-waveguide grating comprising:

an input waveguide for inputting two or more optical signals;

a grating array for separating the input optical signals into different light wavelengths;

a first slab having a first layer and a second layer with different refractive indices from each other for coupling the input waveguide with the grating array;

a second slab for causing the different light wavelengths separated at the grating array to be imaged on an egress surface thereof; and,

an output-waveguide array for outputting each light wavelength imaged on the egress surface of the second slab in a form of a separated channel.

2. An athermal arrayed-waveguide grating according to claim 1, wherein the first layer connected to the input waveguide comprises a predetermined refractive index that is different from the input waveguide.

3. An athermal arrayed-waveguide grating according to claim 1, wherein the second layer interposed between the first layer and the grating array comprises a refractive index that is equal to that of the input waveguide.

4. An athermal arrayed-waveguide grating according to claim 2, wherein the first layer is formed by material having a refractive index of 1.415.

5. An athermal arrayed-waveguide grating according to claim 2, wherein the second layer is formed by material having a refractive index of 1.46.

6. An athermal arrayed-waveguide grating according to claim 2, wherein the first layer of the first slab has a length of 21.07μm in a direction in which the optical signal travels.

7. An optical-waveguide device for guiding an optical signal comprising:

a substrate;

an input waveguide extending at least partially across the substrate,

a grating array for separating the optical signals into different light wavelengths;

a fist slab having a first layer and a second layer for coupling the grating array with the input waveguide; and,

a second slab for coupling the different light wavelengths separated by the grating array to an output waveguide,

where the reflective index of the first layer and the second layer is substantially different.

8. An optical-waveguide device of claim 7, wherein the reflective index of the second layer is the same as the input waveguide.

9. An optical-waveguide device of claim 7, wherein the input and output waveguides extend at least partially across the substrate.

10. An optical-waveguide device of claim 7, wherein the grating array extend at least partially across the substrate.

11. An optical-waveguide device of claim 7, wherein the first layer is formed by material having a refractive index of 1.415.

12. An optical-waveguide device of claim 7, wherein the second layer is formed by material having a refractive index of 1.46.

13. An optical-waveguide device of claim 7, wherein the first layer of the first slab has a length of 21.07μm in a direction in which the optical signal travels.

14. A method of manufacturing an optical-waveguide device for guiding an optical signal, the method comprising steps of:

forming an input waveguide extending at least partially across the substrate;

forming a first slab having a first layer and a second layer extending at one end of the input waveguide, the first layer having a first reflective index value and the second layer having a second reflective index value;

forming a grating array extending at one end of the first slab and extending at least partially across the substrate; and,

forming a second slab extending at one end of the grating array and extending at least partially across the substrate.

15. The method of claim 14, further comprising the step of forming an output waveguide extending at one end of the second slab and extending at least partially across the substrate.

16. The method of claim 14, wherein the reflective index of the second layer is formed by the same reflective index of the input waveguide.

17. The method of claim 14, wherein the first layer is formed by material having a refractive index of 1.415.

18. The method of claim 14, wherein the second layer is formed by material having a refractive index of 1.46.

19. The method of claim 14, the first layer of the first slab has a length of 21.07μm in a direction in which the optical signal travels.